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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2686	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/802,861	PHAN-ANH ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 03/01/2004. These drawings are acceptable.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15, 19, 21 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07).

Regarding claims 15 and 21, the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) teaches a method of recovering location information of a subscriber in a mobile network (see page 13, lines 16-19), the method comprising: upon a Serving-Call State Control Function (S-CSCF) receiving a call setup request for the subscriber from Interrogating-Call State Control Function (I-CSCF) (see page 53, Fig.B.3, V1), forwarding a route request to a User Mobility Server (UMS) (see page 53, Fig.B.3, V6) and receiving a home address of the subscriber (see page 53, Fig.B.3, V5), forwarding the call setup request from the S-CSCF to a home agent at the home address of the subscriber (see page 53, Fig.B.3, V8), forwarding the call setup request from the home agent to the

subscriber (see page 53, Fig.B.3, V11), and forwarding an address update from the subscriber to the S-CSCF (see page 53, Fig.B.3, V7).

Regarding claims 19 and 25, the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) teaches a method of recovering location information of a subscriber in a mobile network (see page 13, lines 16-19), the method comprising: upon an Interrogating-Call State Control Function (I-CSCF) receiving a call setup request for the subscriber (see page 53, Fig.B.3, V1), forwarding a route request to a User Mobility Server (UMS) (see page 53, Fig.B.3, V6) and receiving a home address of the subscriber (see page 53, Fig.B.3, V5), forwarding the call setup request from the I-CSCF to a home agent at the home address of the subscriber (see page 53, Fig.B.3, V8), forwarding the call setup request from the home agent to the subscriber (see page 53, Fig.B.3, V11), and forwarding an address update from the subscriber to the I-CSCF (see page 53, Fig.B.3, V8).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 5, 8, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharatia (Pub.No.: US 2001/0031635 A1).

Regarding claims 1, 8 and 9, Bharatia teaches a method of recovering location information of a subscriber in a mobile network (see page 4, [0081]), the method comprising: forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) (see fig.3) including the subscriber's Transport Address (TA) which is a current Care of Address of the subscriber (see page 4, [0079]), forwarding a location update from the S-CSCF to a Home Subscription Server (HSS) (also see fig.3) including the subscriber's TA and address of the S-CSCF (also see page 4, [0079]), and storing information including the subscriber's TA in the HSS so as to be protected against loss (see page 4, [0081], the teaching of Bharatia inherently teaches storing information so as to be protected against loss).

Bharatia does not specifically disclose storing data. However, those skilled in the art thus would appreciated that the teaching of Bharatia could be modified such that storing data including the subscriber's TA in the HSS without changing the scope of Bharatia's invention.

Therefore, it would have been obvious to one ordinary skill in the art at the time

of the invention was made to modify the teaching of Bharatia, in order to prevent data from being lost.

Regarding claim 2, Bharatia teaches upon the S-CSCF losing information, lost information including the subscriber's TA may be restored to the S-CSCF from the information stored in the HSS (see page 4, [0081]).

Bharatia does not specifically disclose storing data. However, those skilled in the art thus would appreciated that the teaching of Bharatia could be modified such that lost data including the subscriber's TA may be restored to the S-CSCF from the data stored in the HSS without changing the scope of Bharatia's invention.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of Bharatia, in order to prevent data from being lost.

Regarding claims 5 and 12, Bharatia teaches a method of recovering location information of a subscriber in a mobile network (see page 4, [0078] and [0081]), the method comprising: forwarding a registration request from the subscriber to a Serving-Call State Control Function (S-CSCF) (see fig.3) including the subscriber's TA Transport Address (TA) which is a current Care of Address of the subscriber (see page 4, [0079]), forwarding a location update from the S-CSCF to a Home Subscription Server (HSS) (see fig.3) including the subscriber's TA (also see page 4, [0079]), and storing information including the subscriber's TA in the S-CSCF so as to be protected against loss (see page 4, [0078] and [0081], the teaching of Bharatia inherently teaches storing information so as to be protected against loss).

Bharatia does not specifically disclose storing data. However, those skilled in the art thus would appreciated that the teaching of Bharatia could be modified such that storing data including the subscriber's TA in the S-CSCF without changing the scope of Bharatia's invention.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of Bharatia, in order to prevent data from being lost.

7. Claims 3, 4, 6, 7, 10, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bharatia (Pub.No.: US 2001/0031635 A1) in view of Taguchi et al (US 6,136,532).

Regarding claims 3, 6, 10 and 13, Bharatia teaches storing data in the HSS (see page 4, [0078], [0079] and [0081]). Bharatia does not specifically disclose storing data in a non-volatile memory.

Taguchi teaches storing data in a non-volatile memory (see column 16, lines 53-58).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Taguchi into the system of Bharatia in order to retain the data in the event of power losses.

Regarding claims 4, 7, 11 and 14, the combination of Bharatia and Taguchi further teaches storing data in a non-volatile memory in the HSS comprises storing data in a hard disk drive (see Taguchi, column 16, lines 53-58).

8. Claims 16, 22 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) in view of Sanchez-Herrero et al (Pub.No.: US 2002/0147845 A1).

Regarding claims 16, 22 and 26, the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) teaches the method of claims 15 22 and 26. The 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) does not specifically disclose forwarding the route request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care Of Address of the subscriber.

Sanchez-Herrero et al (Pub.No.: US 2002/0147845 A1) teaches forwarding the route request to the UMS comprises forwarding an indication to the UMS that the S-CSCF fails to have a Care Of Address of the subscriber (see page 5, [0047]).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Sanchez-Herrero into the system of the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) in order to deliver performance feedback to the sender.

9. Claims 17, 20, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) in view of Bergenwall et al (US 6,721,291).

Regarding claims 17, 20, 23 and 27, the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) teaches 15. The 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) does not

specifically disclose forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

Bergenwall teaches forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber (see column 4, lines 54-60).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Bergenwall into the system of the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) in order to prevent wasting bandwidth (see Bergenwall, column 4, lines 60-63).

10. Claims 18, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) in view of Sanchez-Herrero et al (Pub.No.: US 2002/0147845 A1) and further in view of Bergenwall et al (US 6,721,291).

Regarding claims 18, 24, and 28, the combination of the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) and Sanchez-Herrero teaches 16, 22 and 26. The combination of the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) and Sanchez-Herrero does not specifically disclose forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber.

Bergenwall teaches forwarding the call setup request from the home agent to the subscriber comprises forwarding the call setup request to a Care Of Address of the subscriber (see column 4, lines 54-60).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to provide the teaching of Bergenwall into the system of the 3GPP (3G TR 23.821 V1.0.1 Release 2000-07) and Sanchez-Herrero in order to prevent wasting bandwidth (see Bergenwall, column 4, lines 60-63).

Response to Arguments

11. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (703) 605-5164. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

05/16/04

CHARLES APPIAH
PRIMARY EXAMINER